

CLAIMS

1. A physical quantity detecting device comprising a resistor formed on a thin-wall portion of a substrate and electrodes respectively connected through first lead conductors to both ends of said resistor and made to detect a physical quantity through the use of said resistor,

characterized by including second lead conductors electrically connected to both ends of said resistor and formed to extend to an outer circumferential end of said substrate.

2. A physical quantity detecting device according to claim 1, characterized in that at least one of said second lead conductors has, in the middle thereof, a disconnection portion for making electrical disconnection.

3. A physical quantity detecting device according to claim 1, characterized by further comprising a second resistor formed on said substrate and made of the same material as that of said first-mentioned resistor, with temperature coefficients of resistance of said first-mentioned resistor and said second resistor being different by at least more than $\pm 0.25\%$ from each other.

4. A physical quantity detecting device according to claim 3, characterized in that the material for the formation of said resistor and said second resistor is made with one of

platinum and polysilicon doped with impurities, and said temperature coefficient of resistance of said resistor is lower by more than 0.25% than that of said second resistor.

5. A physical quantity detecting device according to claim 3, characterized in that the material for the formation of said resistor and said second resistor is made with single-crystal silicon doped with impurities, and said temperature coefficient of resistance of said resistor is higher by more than 0.25% than that of said second resistor.

6. A physical quantity detecting device according to claim 1, characterized in that said substrate is a semiconductor substrate.

7. A method for manufacturing a plurality of physical quantity detecting devices each comprising a resistor formed on a thin-wall portion of a substrate and electrodes respectively connected through first lead conductors to both ends of said resistor so that a physical quantity is detected through the use of said resistor,

characterized in that said plurality of resistors are concurrently formed on said substrate and after both ends of each of said plurality of resistors are successively electrically connected through a second lead conductor, the plurality of resistors are simultaneously energized to be heated, and said substrate is divided in units of single resistors.

8. A method for manufacturing a physical quantity detecting device according to claim 7, characterized in that, after the energization heating, said second lead conductor for making connection among said resistors is disconnected electrically.

9. A motor vehicle control system comprising a physical quantity detecting device and a control unit for controlling a motor vehicle on the basis of a condition of said motor vehicle detected by said physical quantity detecting device, with said physical quantity detecting device being composed of a resistor formed on a thin-wall portion of a substrate and electrodes respectively connected through first lead conductors to both ends of said resistor so that a physical quantity is detected through the use of the resistor,

characterized by including a second lead conductor electrically connected to both ends of said resistor of said physical quantity detecting device and made to extend to an outer circumferential end of said substrate.